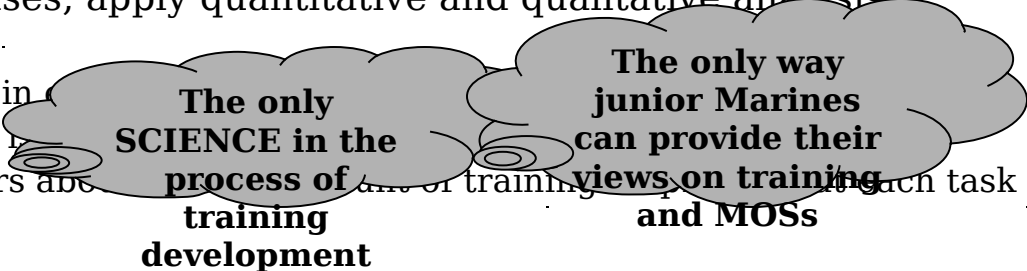# Training Development Section's Software/Hardware Courses of Action for Training and Occupational Analysis

Presentation for ITMAB

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Ground Training Branch

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Background

- Front End Analysis Program – MCO 1200.15 – Purposes
  - Ascertain/validate job tasks for each OccFld
  - Validate MOS structure or recommend change
  - Empirically determine training required for Entry-level MOS training
  - Provide starting point for T&R Manual's individual training standards
- Process
  - With OccFld Manager, develop task list
  - Survey statistically valid sample of job incumbents *and their supervisors* from OccFld population
    - All MOSs
    - All Grades
  - Compile survey responses, apply quantitative and qualitative analysis
  - FEA Report
    - Percent of population in each MOS and grade performing each tasks
    - Grade at which a task is performed
    - Opinions of supervisors about the level of training each task should receive

The only SCIENCE in the process of training development

The only way junior Marines can provide their views on training and MOSs

Current IT

- MS-Office Suite to create survey booklets
- NCS Pearson OpScan OMR Scanner and Bubblesheets used for survey responses
    - USMC only of its kind scanner ~ $15K
    - Sample size ~ 300-900 respondents
    - 300-900 responses on each survey
    - Written responses framed by questions, limited number
- NCS Pearson ScanTools software to pattern bubblesheet marks into data framework
- Comprehensive Occupational Data Analysis Program (CODAP) used by USMC and USAF
    - Application developed by/for USAF
    - Used by USMC, Canadian Armed Forces
    - IBM RSC 6000 server with AIX Unix Operating System

Catalysts for Change

- Hardware/software failures
  - RSC 6000 hardware failure two years ago
  - Operating System failure this year
- Winds of Change for hardware/software purchases....NMCI and CIO mandates – lag time in acquiring approvals
- USAF migrated to Contractor-performed on-line surveys
  - No longer can provide technical assist with scanning to data files
- USCG abandoned CODAP, now using Contractor-performed surveys processed using SPSS
- Not all surveys require the crunching power of CODAP
- One-of-a-Kind Military billet for CODAP Programmer – No job prepares incumbent, no backup to incumbent

Issues

- Two Different Issues
  - Survey of Job Incumbents
  - Analysis of Data & Preparation of Reports
- "As-Is"
  - Survey of incumbents using bubblesheets
  - OPSCAN scanner builds text file or .dat file (?)
  - .dat file used by CODAP for statistical processing
  - CODAP provides requested reports
- "To-Be" Options talked about
  - Integrate with TIMS (TECOM Integrated Management System)
  - Stay with Air Force's CODAP
  - Explore feasibility of using 3rd-Party software for on-line surveys
  - Explore feasibility of using contractors for surveys
  - Explore feasibility of using 3rd-Party software for statistical processing

Survey of Job Incumbents

- Bubble Sheets
  - Scan-Tools II Software purchased to create "forms"
  - Annual purchase of bubblesheets
  - One survey per job incumbent, and you know when you have enough or need more
  - Manual labor costs of assembly & disassembly, travel costs, mailing costs
  - Periodic software/hardware renewal costs
  - One person in USMC can scan and import data

- On-Line Survey
  - Either TDS-supported or Contractor-supported
  - 3rd-Party Software?
  - Avoid manual labor costs, travel costs, mailing costs
  - Requires construction of on-line survey
  - Requires tracking of survey responses
  - Requires some form of security – one response per job incumbent; know who has responded and who hasn't
    - Anonymity an issue?
  - Requires translation of survey data into a format for the processing software

Data Processing & Report Generation

- AIX Unix OS software renewal approved recently by G-6
- RSC 6000 hardware needs modernization within two years
- Air Force continues support for CODAP?
  - Discontinued bubblesheet survey w/ loss of support
  - USAF likely to abandon CODAP? ***NO***
- What other statistical analysis tools could satisfy some of our needs?
  - SPSS?....MCU has SPSS and a server
    - What analysis tools are built into User software?
  - SAS?....M&RA is using as an analytical tool
    - What analysis tools are built into User software?
  - CODAP?....Cluster diagram is established and understood

GTB's Way Ahead

- Explore options for surveying
  - Sustain current bubblesheet technology and skillsets
    - » Gain & maintain ScanTools II software and training
    - » Maintain OMR scanner with vendor service contract as needed
  - Explore Contractor-performed, on-line surveys
    - » Data output suitable for CODAP processing?
    - » Data output suitable for SPSS (etc.) processing?
  - Explore GTB-performed, on-line surveys
    - » Data server requirements/Web server requirements
    - » Various COTS solutions for survey applications
    - » Remain attuned to TIMS development for potential options
  - Explore COTS statistical analysis options
    - » Receive SPSS vendors' proposal to fulfill GTB's needs (scheduled first meeting 30 Jan 2004)
    - » Purchase/study SPSS as ***augment*** to CODAP

GTB Asks G-6/ITMAB to…

- Recognize that TDS' hardware, software, processes are Service-level, one-of-a-kind
- Support requests for renewal purchases without delay
- Support requests for exploratory purchases
  - SPSS – User licenses
  - ScanTools – Developers License
- Offer ideas to be leveraged
  - SPSS software already owned within TECOM?
  - Server already owned within TECOM?
  - Web surveys supportable with current contract support?
  - Linkage to other systems to provide respondent security?